Before the **FEDERAL COMMUNICATIONS COMMISSION** 

Washington, DC 20554

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COMMENTS OF DigiCert, Inc.

On behalf of DigiCert, Inc., I wish to express comments for the Amendment of the Commission's Rules to Promote Aviation Safety.

About DigiCert:

DigiCert is a US corporation, with headquarters in Lehi UT, and has about 1,000 employees. We are privately held and we do not disclose our revenue nor other financial information.

DigiCert was the first CA (Certification Authority), we are the largest CA globally, and we are the first and only CA to be approved for use by AeroMACS. We would like to share our perspective on the importance of a Channel Manager as it relates to the FCC's Rulemaking. In short, we welcome the idea, we are seeing market demand for this role, and our experience is that a strong and independent Channel Manager will increase the trustworthiness of the AeroMACS ecosystem.

DigiCert has seen the role of Channel Manager emerge over the last 10 years or so, and it is now considered a best practice. Sometimes the Channel Manager is referred to as Governing Authority, a Policy Authority, a Management Authority, etc., and the unifying concept is the same: various ecosystems want a single entity in this role, which can be trusted. This approach has been successfully deployed in with multiple ecosystems:

CableLabs: protecting over 500 million DOCSIS devices (mainly cable modems)

- CI Plus: protecting over 600 million pay-TV televisions (in Europe)
- GSMA: for the security of the Remote SIM architecture (in all mobile phones, globally)
- OCF: for the security of all forms of IoT devices uses by consumers
- USB-IF: enabling the new USB Type C Authentication security platform
- Wi-Fi Alliance: enabling security between Wi-Fi devices and the networks they connect to
- WiMAX Forum: for the security of 802.16e networking devices
- WInnForum: for the security of 5G/CBRS networking devices

DigiCert, Inc. would like to express its comments to the Commission's Notice of Proposed Rulemaking to Promote Aviation Safety. The NPRM is broadly quite good, however we wish to highlight three specific areas for improvement.

## 1- Eligibility and Licensing

Airlines plans to use AeroMACS services to improve safety and flight performance. Aeronautical communications network providers ("ACNPs") play a critical role in facilitating communications in airports to provide a dedicated common user network to aviation users. Manufacturers or prospective users of AeroMACS and their representatives plan to use AeroMACS for purposes of network development and product demonstrations on a temporary basis. It is critical that airlines, ACNPs, manufacturers and prospective users of AeroMACS are included in the FCC's list of those automatically eligible to be users of AeroMACS.

The proposed rules would unnecessarily complicate access to AeroMACS spectrum for important stakeholders. The rules should not be limited, but include other entities as outlined in the original WiMAX Forum Petition to avoid unnecessary barriers, additional costs and optimize channel access and

the use of the AeroMACS services with a license by rule rather than the NPRM's formulation of licensing on a site-by-site basis. The proposed rules for individual licensing of fixed and mobile AeroMACS networks seem onerous and all interested stakeholders should have equal access to channels in the AeroMACS band as managed by the Channel Coordinator.

## 2- Channel Management Coordination

To ensure fair management and most efficient exploitation of AeroMACS channels, the FCC should designate as channel manager an entity that is: a non-profit and impartial and an expert in AeroMACS technology to ensure optimum management of AeroMACS channels.

Coordination should be performed by a single, nationwide channel manager to provide AeroMACS users with one point of contact, maximize the efficient use of spectrum, enabling AeroMACS to meet the unique needs of each location.

The channel manager shall coordinate channels between non-Federal and federal AeroMACS users to maximize efficient use of the spectrum at each airport. This coordination will ensure the efficient use of AeroMACS spectrum by employing sharing approaches tailored to the needs of the federal and non-federal AeroMACS users at each airport.

The Channel Manager shall help with the coordination of other authorized users in the band such as Globalstar and operators of flight test systems. The Channel Manager will act as a single point of contact for non-federal AeroMACS users should coordination be needed by the other authorized users of the band.

Under the rule proposed by the WiMAX Forum, the channel manager should make its services available on a non-discriminatory basis to all eligible AeroMACS users, ensure nationwide consistency for access to AeroMACS spectrum, and save eligible users time and money. The Forum also envisions the creation of an oversight board representative of industry to ensure transparency and provide guidance the operations of the Channel Manager. We believe any requirement to perform a pre coordination with FAA Regional Offices will surely add delays and costs and is simply not necessary given the coordination implicit between the Channel Manager and the FAA.

## 3- Technical Rules

AeroMACS requires the adoption of rules based on international technical standards. The FCC should adopt the proposed technical rules based on the requirements currently incorporated in the International Civil Aviation Organization (ICAO) Standards and Recommended Practices and in the RTCA Minimum Operational Performance Standards.

## Conclusion

DigiCert, Inc. wish to express its appreciation to the FCC for seeking comments on seeking comments on Aviation Services Notice of Proposed Rulemaking proposing services rules for AeroMACS. In light of the significant benefits that will be realized by the swift and widespread deployment of AeroMACS networks, DigiCert, Inc. urges the Commission to expeditiously adopt a Rulemaking proposing service rules for AeroMACS.

The Commission's rules will encourage the deployment of AeroMACS and promoting the role of Channel Manager with license by rule operations ensuring the facilitation of the use of the spectrum by other entities such as Communication Network/Service providers, Airports and Airlines. The adoption of applicable rules will aid in efforts to globally harmonize operations in this band, thus speeding deployment of AeroMACS networks in the United States and worldwide.

Respectfully submitted,

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By

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